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Clean Version of Allowed Claims 1-31, 33-56 and 58-69
Application Serial No. 10/084590



1 (Amended). An apparatus, comprising:
a first expandable member expandable by an expansion media, the first expandable member including an exterior and a plurality of apertures, the first expandable member releasing the expansion medium when a sufficient pressure is applied to the expansion medium housed in an interior of the first expandable member;

a second expandable member positioned at least partially adjacent to the first expandable member, the second expandable member being configured to receive at least a portion of the expansion medium from the interior of the first expandable member; wherein the first and second expandable members are sized to be expanded sufficiently to open a sphincter; and

an electromagnetic energy delivery device coupled to one of the first or second expandable members, wherein the electromagnetic energy delivery device is configured to deliver energy to sphincter tissue, and

a flexible coupling member coupled to one of the first or second expandable members, the coupling member configured to be maneuverable in a body lumen.

2 (Amended). The apparatus of claim 1,
wherein the electromagnetic energy delivery device includes a plurality of energy delivery members evenly distributed on an external surface of one of the first or second expandable members.

3. The apparatus of claim 2, wherein the plurality of energy delivery members are evenly distributed around a circumference of the external surface of one of the first or second expandable members.

4. The apparatus of claim 2, wherein the coupling member has a length sufficient to position the first expandable member adjacent to the sphincter.

5 (Amended). The apparatus of claim 1, wherein the first and second expandable members are sized to be expanded sufficiently to open the lower esophageal sphincter.

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6 (Amended). The apparatus of claim 2, wherein a proximal portion of the coupling member is maneuverable by a medical practitioner.

7. The apparatus of claim 1, wherein the electromagnetic delivery device includes an RF electrode.

8. The apparatus of claim 1, wherein the electromagnetic energy delivery device is a plurality of RF electrodes.

9. The apparatus of claim 8, wherein the plurality of electrodes is a flexible circuit.

10. The apparatus of claim 7, wherein the RF electrode is coupled to the first expandable member.

11. The apparatus of claim 7, wherein the RF electrode is coupled to the first expandable member.

12. The apparatus of claim 10, wherein the RF electrode is positioned on a surface of the first expandable member.

13. The apparatus of claim 10, wherein the RF electrode is positioned on a surface of the second expandable member.

14. The apparatus of claim 10, wherein the RF electrode is positioned in the second expandable member.

15. The apparatus of claim 1, further comprising:
a mechanical expansion device coupled to the first expandable member.

16. The apparatus of claim 1, wherein the first expandable member is a balloon.

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17. The apparatus of claim 1, wherein the second expandable member is made of a porous membrane.

18. The apparatus of claim 1, wherein the second expandable member is made of an open cell material.

19. The apparatus of claim 1, further comprising:
a groundpad electrode configured to be coupled to an exterior surface of a patient.

20. The apparatus of claim 1, wherein the expansion medium is an electrolytic expansion medium.

21. The apparatus of claim 20, further comprising:
an electrolytic solution source; and
a fluid delivery device configured to be coupled to the electrolytic solution source and the first expandable member.

22. The apparatus of claim 1, further comprising:
a heating device for heating the expansion medium.

23. The apparatus of claim 22, wherein the heating device is positionable in the interior of the first expandable member.

24. The apparatus of claim 22, wherein the heating device is coupled to an expansion medium source.

25 (Amended). The apparatus of claim 1, further comprising:
a visualization device coupled to the first expandable member.

26. The apparatus of claim 25, wherein the visualization device extends beyond a distal portion of the first expandable member.

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27. The apparatus of claim 25, wherein at least a portion of the visualization device extends through the first expandable member.

28 (Amended). An apparatus, comprising:
an elongated introducer with a non-tissue penetrating distal end;
an expandable member coupled to a distal portion of the elongated introducer, the expandable member having a non-deployed and a deployed state, the expandable member being sized to be at least partially positioned in an interior of the sphincter and of sufficient size in the expandable state to at least partially efface the folds of the sphincter; an electromagnetic energy delivery device coupled to the expandable member and configured to be coupled to a power source, the electromagnetic energy delivery device including a first tissue penetrating electrode and a second tissue penetrating electrode; and

wherein the expandable member is sized in the deployed state to at least partially dilute the sphincter and introduce the first and second tissue penetrating electrodes into the at least partially effaced sphincter folds and sized in the non-deployed state to retract the first and second electrodes from the at least partially effaced sphincter folds.

29. The apparatus of claim 28, further comprising:
a coupling member coupled to the expandable member.

30. The apparatus of claim 29, wherein the coupling member has a length sufficient to position at least a portion of the expandable member in the lower esophageal sphincter.

31. The apparatus of claim 29, wherein the coupling member has a length sufficient to position at least a portion of the expandable member distal to the lower esophageal sphincter.

33 (Amended). The apparatus of claim 29, wherein a proximal portion of the coupling member is maneuverable by a medical practitioner.

34. The apparatus of claim 28, wherein the electromagnetic delivery device includes an RF electrode.

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35. The apparatus of claim 28, wherein the electromagnetic delivery device is a plurality of RF electrodes.

36. The apparatus of claim 35, wherein the plurality of electrodes is a flexible circuit.

37. The apparatus of claim 34, wherein the RF electrode is coupled to an expandable member.

38. The apparatus of claim 34, wherein the RF electrode is positioned on a surface of the expandable member.

39. The apparatus of claim 34, wherein the RF electrode is positioned in the expandable member.

40. The apparatus of claim 28, further comprising:
a mechanical expansion device coupled to the expandable member.

41. The apparatus of claim 28, wherein the expandable member is a balloon.

42. The apparatus of claim 28, wherein an exterior surface of the expandable member is at least partially made of a porous membrane.

43. The apparatus of claim 28, wherein an exterior surface of the expandable member is at least partially made of an open cell material.

44. The apparatus of claim 28, further comprising:
a groundpad electrode configured to be coupled to an exterior surface of a patient.

45. The apparatus of claim 28, wherein the expansion medium is an electrolytic expansion medium.

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46. The apparatus of claim 45, further comprising:
an electrolytic solution source; and
a fluid delivery device configured to be coupled to the electrolytic solution source and the expandable member.

47. The apparatus of claim 28, further comprising:
a heating device for heating the expansion medium.

48. The apparatus of claim 47, wherein the heating device is positionable in the interior of the expandable member.

49. The apparatus of claim 47, wherein the heating device is coupled to an expansion medium source.

50 (Amended). The apparatus of claim 28, further comprising:
a visualization device coupled to the expandable member.

51. The apparatus of claim 50, wherein the visualization device extends beyond a distal portion of the expandable member.

52. The apparatus of claim 50, wherein at least a portion of the visualization device extends through the interior of the expandable member.

53 (Amended). An apparatus, comprising:
an endoscope including a lumen;
an elongated introducer with a non-tissue penetrating distal end;
an expandable member coupled to a distal portion of the elongated introducer, the expandable member having a non-deployed and a deployed state, the expandable member being sized to be at least partially positioned in an interior of the sphincter and of sufficient size in the expandable state to at least partially efface the folds of the sphincter, the expandable member being positionable in the lumen;

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an electromagnetic energy delivery device coupled to the expandable member and configured to be coupled to a power source, the electromagnetic energy delivery device including a first tissue penetrating electrode and a second tissue penetrating electrode; and

wherein the expandable member is sized in the deployed state to at least partially dilate the sphincter and introduce the first and second tissue penetrating electrodes into the at least partially effaced sphincter folds and sized in the non-deployed state to retract the first and second electrodes from the at least partially effaced sphincter folds.

54. The apparatus of claim 53, further comprising:
a coupling member coupled to the expandable member.

55. The apparatus of claim 54, wherein the coupling member has a length sufficient to position at least a portion of the expandable member in the lower esophageal sphincter.

56. The apparatus of claim 54, wherein the coupling member has a length sufficient to position at least a portion of the expandable member distal to the lower esophageal sphincter.

58 (Amended). The apparatus of claim 54, wherein a proximal portion of the coupling member is maneuverable by a medical practitioner.

59. The apparatus of claim 53, wherein the electromagnetic delivery device includes an RF electrode.

60. The apparatus of claim 53, wherein the electromagnetic energy delivery device is a plurality of RF electrodes.

61. The apparatus of claim 60, wherein the plurality of electrodes is a flexible circuit.

62. The apparatus of claim 59, wherein the RF electrode is coupled to the expandable member.

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63. The apparatus of claim 59, wherein the RF electrode is positioned on a surface of the expandable member.

64. The apparatus of claim 63, wherein the expandable member is configured to be advanced from a distal end of the lumen.

65. The apparatus of claim 53, further comprising:
a visualization channel formed in the interior of the endoscope.

66. The apparatus of claim 65, further comprising:
a visualization device configured to be positionable in the visualization channel.

67 (Amended). The apparatus of claim 53, further comprising:
a visualization device coupled to the expandable member.

68. The apparatus of claim 67, wherein the visualization device extends beyond a distal portion of the expandable member.

69. The apparatus of claim 67, wherein at least a portion of the visualization device extends through the interior of the expandable member.